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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,351	11/14/2001	Kazuhisa Sato	107348-00170	6954

4372 7590 11/03/2004

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EXAMINER

PHASGE, ARUN S

ART UNIT PAPER NUMBER

1753

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/987,351

Applicant(s)

SATO, KAZUHISA

PN

Examiner

Arun S. Phasge

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 4-6, 17-18, 20-22, 24-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki in view of Chiarelli of record for reasons of record.

Claims 8-10, 12-14 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki in view of Chiarelli as applied to claims above, and further in view of Jacobi of record for reasons of record.

Claims 3, 7, 11, 15, 19 and 23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki in view of Chiarelli as applied to claims above, and further in view of Narayanan of record for reasons of record.

Claims 29-32 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki in view of Chiarelli as applied to claims above, and further in view of Born of record for reasons of record.

*Response to Arguments*

Applicant's arguments filed 7/26/04 have been fully considered but they are not persuasive.

Applicants argue that since the primary reference of Sasaki patent teaches that there is not need for storage of hydrogen in tanks, bombs etc, the reference teaches against modification to allow the storage of gaseous hydrogen under pressure.

While the Sasaki patent does teach the production of hydrogen just when needed, thus doing away with any storage, it does not teach away from the use of tanks as suggested in the secondary reference. The Chiarelli patent uses storage tanks to store the hydrogen formed by electrolysis of water (abstract). The power supply for the electrolysis is obtained by a photovoltaic cell which would only produce energy during sunshine (abstract). Storage tanks allow the generated hydrogen to be stored when necessary for use, whereas the primary reference forms hydrogen when necessary for use. One having ordinary skill in the art would find it obvious to modify the disclosure of the Sasaki patent with the teachings of the Chiarelli patent, because when excess hydrogen is generated storage of the

excess hydrogen until needed is beneficial and would not waste a valuable commodity.

Applicant further argues with the combination of all the other combinations of references by stating that since Sasaki teaches there is no need for storage of the hydrogen in tanks the claimed invention would not have been obvious over the combinations of record.

As stated above one having ordinary skill in the art, even given the teachings of Sasaki where no storage means is needed, would have been motivated by the Chiarelli patent to use tanks to store excess generated hydrogen rather than waste the hydrogen. Accordingly, all the claims stand rejected.

#### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

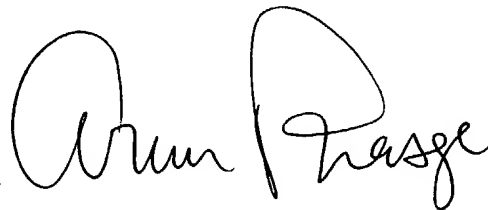
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the

advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Arun Phasge', with a large, stylized initial 'A' and 'P'.

Arun S. Phasge  
Primary Examiner  
Art Unit 1753

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